U.S. Application No.: 09/746,744 Attorney Docket No.: AVA06-54

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## **REMARKS**

In response to the Office Action mailed on December 21, 2006, Applicants respectfully requests reconsideration. Claims 1-44 are now pending in this Application. Claims 1, 12, 25, 28, and 39 are independent claims and the remaining claims are dependent claims. In this Amendment, claims 1, 12, 25, 28, and 39 have been amended. A version of the claims containing markings to show the changes made is included hereinabove. Applicants believe that the claims as presented are in condition for allowance. A notice to this affect is respectfully requested.

## **Preliminary Matters**

In the Advisory Action the Examiner stated that he was unable to find support for the newly added limitations in the specification. As recited in the present response, and in the response filed on August 14, 2006, the limitation of "said layer 2 processing or a higher layer processing including at least one of switching said packet and routing said packet" is inherently done at layer 2 (some switching related to Quality of Service, or QoS, may be accomplished at layer 3) as is known by a person having an ordinary skill in the art. This is also supported by a printout from the web site of Nortel Networks which describes the switching at layers 2 and 3. (Please see previously submitted:

http://www.nortel.com/solutions/ enterprise/enabling tech/layer2-3/index.html as printed on August 10, 2006). Thus, while the application may not explicitly state the fact that layer 2 processing or higher layer processing including at least one of switching said packet and routing said packet, it is well know by one of ordinary skill in the art. The printout from Nortel Networks also confirms this well-known fact.

Claims 1-44 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No.6,611,519 to Howe et al. (hereinafter Howe). Applicants

respectfully disagrees with these contentions and assert that the present claimed invention is not anticipated by any disclosure in the Howe references.

Independent claims 1, 12, 25, 28, and 39 have been amended to reflect processing of a packet at a layer 2 or a higher layer includes at least one of packet switching and packet routing. This is supported by the fact well-known to a person having an ordinary skill in the art that a packet is processed in the layers 2 and 3 of the seven-layer OSI (Open System Interconnect) model.

The Examiner has previously stated that he has not found our earlier arguments persuasive that our invention differs form the Howe reference (US Pat. No. 6,611,519, hereinafter Howe) because our invention operates at layer 2 whereas Howe operates at layer 1. The Applicant respectfully states that each of the currently amended independent claims includes processing at layer 2 or a higher layer and such processing includes at least one of packet switching and packet routing. Further, packet switching (and/or routing) is inherently done at layer 2 (some switching related to Quality of Service, or QoS, may be accomplished at layer 3) as is known by a person having an ordinary skill in the art. This is also supported by a printout from the web site of Nortel Networks which describes the switching at layers 2 and 3. (Please see previously submitted: <a href="http://www.nortel.com/solutions/enterprise/enabling\_tech/layer2-3/index.html">http://www.nortel.com/solutions/enterprise/enabling\_tech/layer2-3/index.html</a> as printed on August 10, 2006).

Moreover, the term "packet" as understood by a person having an ordinary skill in the art, describes a group of bits with appended address bits, sender identification bits, and/or other control bits. Further, the layer 1 (Physical Layer) is well-known to be concerned only with a bit transmission. (Appropriately highlighted copies of pages 783, and 774-775 from *Digital and Analog Communication Systems*, by Leon Couch II, Fourth Edition, 1993, previously submitted.) Since the layer 1 handles information only at the bit level, in contrast to a group of bits, e.g., a packet or a frame or a cell or a similar unit, a mention of the term "packet" inherently conveys to a person having an ordinary skill in the

art that all processing or switching will be done in the layers 2 and 3 and  $\underline{not}$  in layer 1.

On referring to the teachings of Howe as disclosed in the column 4, lines 12-42, Howe specifically limits all switching and transmission to layer 1. To the extent Howe discloses a layer 2 processing of a packet, as seen in column 32, lines 1-4, and 18-26, such processing is required because such address/routing information pertains to layers 2 and 3 and Howe schedules and transmits packets at layer 1. Stated differently, Howe needs to extract the layer 2 and layer 3 information from a packet in order to make the packet usable for layer 1. Accordingly, the Applicant wishes to reemphasize that Howe teaches away from processing at layer 2 wherein the processing includes at least one of packet switching and packet routing. Consequently, the invention of the Applicant is not anticipated by Howe and, therefore, is patentably distinct.

The Examiner has rejected claims 1-44 under 35 U.S.C. 102(e) as being anticipated by Howe. The Applicant respectfully traverses the rejection.

As discussed above, the independent claims 1, 12, 25, 28, and 39 have been amended to reflect processing of a packet at a layer 2 or a higher layer includes at least one of packet switching and packet routing. This renders all the independent claims patentably distinct over the teachings of Howe.

Further, it is well-known in the art that packet switching (and/or routing) is inherently done at layer 2 while some switching (and/or routing) related to Quality of Service, or QoS, for example, may be accomplished at layer 3.

Lastly, the term "packet" as understood in the art, means a group of bits with appended address bits, sender identification bits, and/or other control bits. Since layer 1 handles information only at the bit level, in contrast to a packet or a frame or a cell or a similar unit, a mention of the term "packet" inherently conveys to a person having an ordinary skill in the art that all processing or switching will be done in the layers 2 and 3 and <u>not</u> in layer 1.

Therefore, for at least the reasons stated above, the independent claims 1, 12, 25, 28, and 39 are patentably distinct and satisfy all the requirements of 35

U.S.C. § 102(e). Accordingly, the Examiner is respectfully requested to withdraw the rejections.

Claims 2-11 and 31-36 depend directly or indirectly from claim 1 and recite additional features. Similarly, claims 13-24 and 37 depend directly or indirectly from claim 12 and recite additional features; claims 26-27 depend directly or indirectly from claim 25 and recite additional features; claims 29-30 depend directly or indirectly from claim 28 and recite additional features; and claims 40-44 depend directly or indirectly from claim 39 and recite additional features. As the respective independent claims are patentably distinct and in allowable form, these dependent claims are also patentably distinct and in allowable form.

In view of the above, The Examiner's rejections are believed to have been overcome, placing claims 1-44 in condition for allowance and reconsideration and allowance is respectfully requested.

Applicants hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-3735.

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If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 616-9660, in Westborough, Massachusetts.

Respectfully submitted,

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